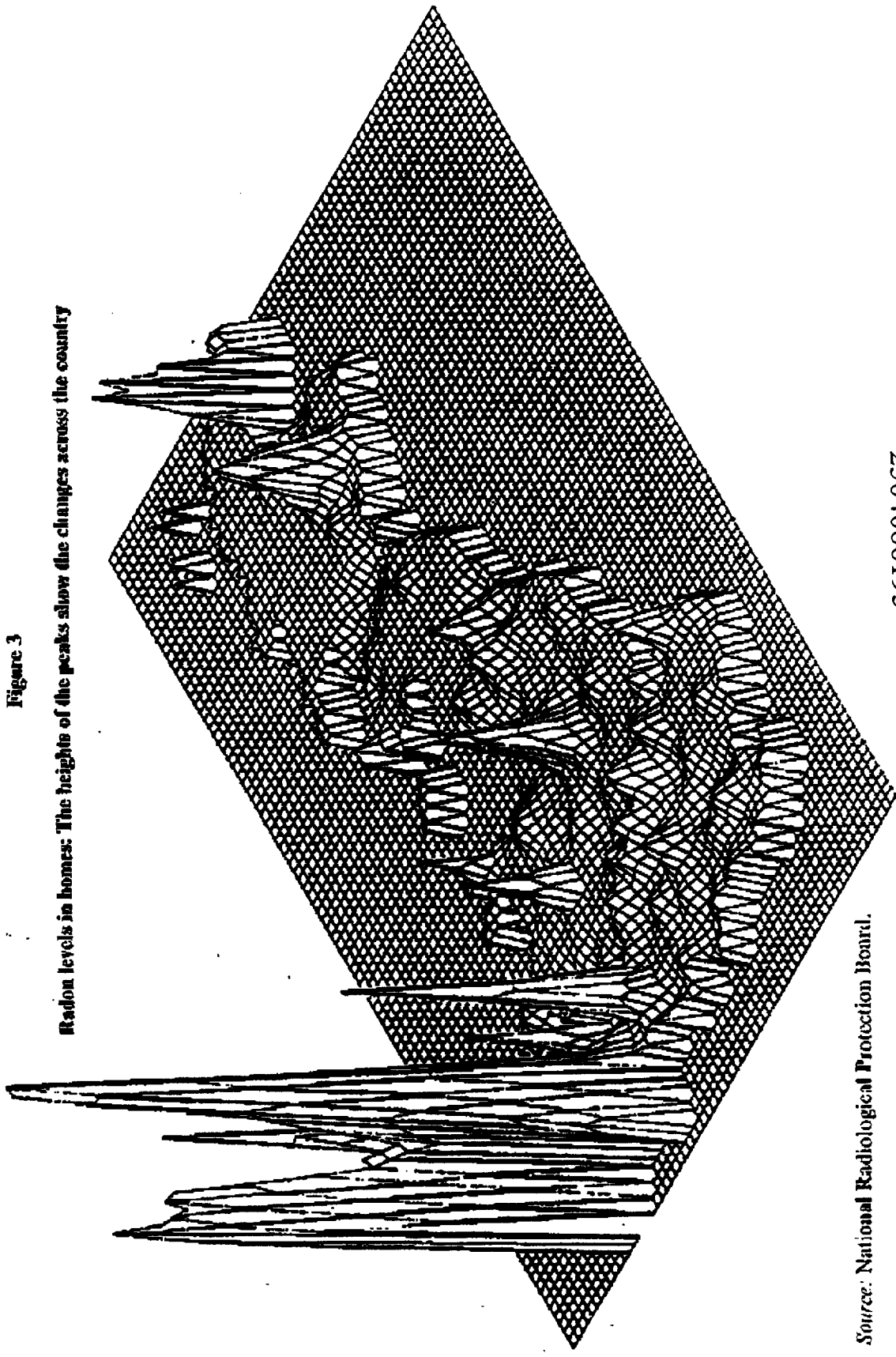

Figure 3

Radon levels in homes: The heights of the peaks show the changes across the country

Source: National Radiological Protection Board.

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Source: https://www.industrydocuments.ucsf.edu/docs/rqhl0000

PROCEEDINGS OF THE COMMITTEE RELATING TO THE REPORT

WEDNESDAY 16 MAY 1990

Members present:

Sir Hugh Rossi, in the Chair.

Mr Henry Bellingham	Mr Keith Mans
Mr Richard Holt	Mr Tom Pendry
Mr Andrew Hunter	Mr Peter L. Pike
Mr Robert B. Jones	Mr Robin Squire

The Committee deliberated.

Mr Robin Squire declared an interest as a Director of the Link Group in relation to the Committee's inquiry into indoor pollution.

WEDNESDAY 13 JUNE 1990

Members present:

Sir Hugh Rossi, in the Chair.

Mr Henry Bellingham	Mr Robert B. Jones
Mr Richard Holt	Mr Tom Pendry
Dr Kim Howells	Mr Robin Squire
Mr Andrew Hunter	

The Committee deliberated.

Sir Hugh Rossi declared an interest as a director of Carter Commercial Developments Ltd and Stock Land and Estates Ltd in relation to the Committee's inquiry into indoor pollution.

Mr Andrew Hunter declared an interest as a Consultant to North England Development Associates in relation to the Committee's inquiry into indoor pollution.

WEDNESDAY 5 DECEMBER 1990

Members present:

Sir Hugh Rossi, in the Chair.

Mr Henry Bellingham	Mr Keith Mans
Mr John Cummings	Mr Robin Squire
Mr Robert B. Jones	

The Committee deliberated.

Mr Robin Squire declared a non-beneficial interest as an honorary Vice-President of the Institution of Environmental Health Officers in relation to the Committee's inquiry into indoor pollution.

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Source: https://www.industrydocuments.ucsf.edu/docs/rqhl0000

WEDNESDAY 16 JANUARY 1991

[The Committee met at the Building Research Establishment, Watford]

Members present:

Sir Hugh Rossi, in the Chair.

Mr Richard Holt
Dr Kim Howells
Mr Robert B. Jones
Mr Terry Lewis
Mr Robin Squire

The Committee deliberated.

Mr Richard Holt declared an interest as a Consultant to the British Furniture Manufacturers Association in relation to the Committee's inquiry into indoor pollution.

WEDNESDAY 12 JUNE 1991

Members present:

Sir Hugh Rossi, in the Chair.

Mr John Battle
Mr John Cummings
Mr Richard Holt
Mr Robert B. Jones
Mr Terry Lewis
Mr Tom Pendry
Mr Anthony Steen
Mr Hugo Summerson

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The Committee deliberated.

Mr Hugo Summerson declared an interest as a Fellow of the Royal Institution of Chartered Surveyors in relation to the Committee's inquiry into indoor pollution.

Mr Richard Holt declared an interest as a Director of MTM plc in relation to the Committee's inquiry into indoor pollution.

Sir Hugh Rossi declared an interest as Consultant in environmental law to Messrs Simmons and Simmons, Solicitors, in relation to the Committee's inquiry into indoor pollution.

Draft Report (Indoor Pollution), proposed by the Chairman, brought up and read.

Ordered, That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 138 read and agreed to.

Resolved, That the Report be the Sixth Report of the Committee to the House.

Ordered, That the Chairman do make the Report to the House.

Ordered, That the provisions of Standing Order No. 116 (Select Committees (reports)) be applied to the Report.

Several papers were ordered to be appended to the Minutes of Evidence.

Ordered, That the Appendices to the Minutes of Evidence taken before the Committee be reported to the House.—*(The Chairman.)*

Several Memoranda were ordered to be reported to the House.

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127. The DOE produces a leaflet for householders on damp and told us that 95,000 copies had been distributed. This is very few in comparison with the number of households estimated to experience the problem (3·5 million). We pointed out to officials that the health implications of damp and mould were not mentioned in the leaflet and the Chief Scientist, Dr Fisk, said that the new edition of the leaflet would address health issues.[1]

128. In addition to providing public information, the Government regulates new building under the Building Act 1984 to ensure that new properties do not suffer from damp. The Building Regulations were reviewed in 1990, when insulation requirements were strengthened and provisions for background ventilation in habitable rooms and mechanical ventilation in kitchens and bathrooms were introduced.[2] Prior to this, ventilation requirements could be met by providing openable windows, which of course the occupant may not utilise. The Head of the Building Regulations Division of the DOE told us that it was ironic that there had been requirements for airbricks in the early 1960s but this requirement was removed because people found them draughty.[3]

129. The Government takes action to remedy existing damp housing under the Local Government and Housing Act 1989. Local authorities have a statutory duty to take action on any dwelling which they find to be unfit and can require compulsory renovation, closure or demolition. The fitness standard specifically addresses mould growth and inadequate means of ventilation, and means-tested grants for remedial action are available for owner-occupiers.[4]

130. The Building Research Establishment has carried out research into the causes of damp. They told us that the key factors were

—thermal insulation;

—the costs of running the heating system;

—the income of occupants; and

—the lifestyle of the occupants, in particular how much moisture is generated.[5]

131. We asked BRE about how problems of damp could be solved and Mr Butler told us

> "We can specifically show that the things to concentrate on are more insulation and improved heating systems, to make sure that the system you produce is affordable to the likely owner ... We know some householders will spend £10 a week and others £6 a week and it is no good giving them a house that requires £20 a week to actually solve problems of condensation."[6]

132. The IEHO drew our attention to the fact that the fitness standard, the main method of addressing the problem of damp housing, does not properly cover these issues.[7] IEHO representatives said that local authorities needed to be able to look at the whole thermal performance of a dwelling, rather than heating, ventilation and repair as separate issues, in order to solve problems of damp and condensation and recommended

> "an urgent review of the fitness standard with the view to incorporating into it an explicit provision, not just for the 'adequate provision of heating' but widening it to expressly require 'adequate provision of energy conservation measures'".[8]

133. It seems to us from the evidence of BRE scientists that existing problems of damp will only be solved by attention to ventilation, thermal insulation and heating. We put this to Mr Trippier in our final session and he replied in writing after the session that the requirement for thermal insulation will be considered in the review of the fitness standard in 1991/92.[9] We consider the current deficiencies in extremely large numbers of the housing stock to be quite unsatisfactory.

[1] Q 38.
[2] Q 12.
[3] Q 16.
[4] Evidence p 9.
[5] Q 937.
[6] Q 938.
[7] Q 1026.
[8] Evidence p 248.
[9] Appendix 31.

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Source: https://www.industrydocuments.ucsf.edu/docs/rqhl0000

completed—studies have been started but the results are not expected for several years.[1] A number of scientists who have recently reviewed existing knowledge about radon have concluded that insufficient is known about the doses of radioactivity received in the home and its impact and questioned whether a radon reduction programme can be justified on present knowledge.[2] Dr Henshaw of Bristol University told us that

> "There have been recent studies looking for a link between radon and lung cancer in the home. Most of these studies have shown no link at all"[3] ... "There is no evidence of measured lung cancer risk from radon exposure in the home."[4]

105. The United States Environmental Protection Agency which has started a very vigorous radon campaign has been heavily criticised for over-estimating the risks and causing needless anxiety to householders.[5]

106. The Department of Health's evidence to us summarised the uncertainties in our knowledge about domestic radon and lung cancer

> "Risk estimates of lung cancer due to exposure to radon in the home environment are based mainly on epidemiological studies of lung cancer rates in uranium and hard rock miners who were exposed to high levels of radon and who suffered from a higher incidence of lung cancer than the general population. The conditions of exposure in the occupational and home environments are, of course, very different. In particular, miners may be exposed to rock dusts containing other radioactive materials such as uranium, or to other toxic substances, as well as to radon and its decay products. Risk estimates for domestic exposure which are based on occupational exposures should therefore be treated with caution."[6]

107. The observed incidence of lung cancer is lower in Cornwall and Devon than average, although this may be due to other factors.[7] Dr Keith Baverstock of the MRC Radiobiology Unit concluded

> "I regret to say that in reality we know little of the risks of exposure to radon in the average United Kingdom domestic environment, although there are some pointers to the conclusion that estimates based on the miner data are somewhat over-estimated. Epidemiological studies on the effects of domestic radon concentration currently under way here and in the United States may in time resolve this issue. In the light of what we already know we should take steps to limit the exposure of those who live in circumstances that lead them to be highly exposed. However, I see no justification for alarm about the risks at average levels of radon exposure in the United Kingdom."[8]

108. The Department of Health stresses the uncertainties surrounding both estimates of the risks of lung cancer associated with radon and the new research in progress on other types of cancer. It concludes

> "Much remains to be done to characterise the nature and extent of the harm to health caused by radon in the home but, of the specific chemical and radioactive agents to which humans are directly exposed, radon rates among the highest priorities for preventative action."[9]

109. Two research groups have recently published papers on other possible cancer risks associated with domestic exposure to radon. Both studies are highly speculative. Dr Henshaw of Bristol University claims that the dose received by different organs exposed to radon is higher than previously thought and claims to have found possible geographical correlations between radon exposure and a number of other cancers including myeloid leukaemia, melanoma and prostate cancer. He stresses that his data are not proof of cause and effect but are pointers of the need for further investigation.[10] In addition, the Leukaemia Research Fund Epidemiology Research Unit

[1] Evidence p 41.
[2] Angela Mawle, ICCET, Imperial College and Dr C Bowie and Dr S Bowie, Evidence not printed.
[3] Q 715.
[4] Q 716.
[5] Editorial, *Science*, Volume 250, 19 October 1990.
[6] Appendix 27.
[7] Appendix 19.
[8] *Ibid.*
[9] Appendix 27.
[10] Evidence p 155, 156.

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Source: https://www.industrydocuments.ucsf.edu/docs/rqhl0000

should have access to better guidance on builders who have training and experience in work on radon-proofing and welcome the establishment of the Radon Council, which should raise the level of knowledge on the issue.[1] **We recommend that the Government seek to establish, in consultation with the building industry, a list of specialist radon-proofing contractors with appropriate knowledge, training and experience.**

123. The HSE is responsible for regulating exposure to radon at work.[2] The radiation levels at work are controlled by statute which contrasts with the voluntary system for domestic buildings. The HSE told us of the action taken by inspectors with respect to radon.[3] We were particularly concerned that the HSE said that no link was ever made between exposure to radon at work and at home and, indeed, said that these should not be compared.[4] We found this surprising since it is the cumulative doses of all radiation received which affect health. The HSE explained that the risks were treated separately because of the different legal bases for the control of radiation at work and in the home.[5] We understand this, but still consider that individuals should be aware of their total exposure to radon. Under questioning, HSE officials agreed that this was "essential"[6] and that some mechanism should facilitate this.[7] **We recommend that those who are found to be exposed to high levels of radon at work are specifically targeted and advised to have surveys at home.**

124. We were particularly concerned about radon levels in schools and hospitals. Cornwall County Council is to be commended for its work on radon-proofing schools in the county. A rolling programme of testing is running and remedial action has been taken for sixty properties at a cost of over £400,000.[8] We received figures showing radon levels in health care premises in Cornwall, some of which were well above the action level.[9] We understand remedial work has been carried out on some of the worst examples.

DAMP AND CONDENSATION

125. Damp surfaces promote the growth of bacteria, moulds and mites. The DOE told us that the English House Condition Survey in 1986 estimated that a fifth of all households, nearly three and a half million homes, experience some mould or damage to decorations due to damp.[10] Mites and moulds are a risk to health and are associated with allergic illnesses. The Department of Health told us:

> "In some people prolonged exposure can lead to hypersensitivity with severe reactions, including breathing difficulties. Generally, the persons affected in these ways by mould spores are those in the population (some 10 per cent) who are particularly liable to be sensitised by allergy-producing substances of many kinds. Those most at risk include children (who can become predisposed to bronchial diseases later in life), the elderly, and those receiving immunosuppressive drug treatment. A recent study found that visible moulds were found twice as often in the homes of people with asthma as in those of the control group. It seems that indoor mould growth may make an important contribution to ill health of many people with asthma."[11]

126. It is clear that the health of very large numbers of the population is affected by living in damp conditions. It is particularly disturbing that many of the problem buildings were built comparatively recently.[12] It seems to us to be quite extraordinary and unacceptable that, after so much investment in housing over many decades, and with a system of building regulation in place, so many people still suffer from damp housing. A new sense of urgency is now needed in tackling the problem.

[1] Letter from the Chairman of the Radon Council, Evidence not printed.
[2] Evidence p 89.
[3] Q Q 481–491.
[4] Evidence p 87.
[5] Q 493.
[6] Q 496.
[7] Q 498.
[8] Appendix 16.
[9] Appendix 37.
[10] Evidence p 9.
[11] Appendix 27.
[12] Evidence p 246.

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has recently published an atlas of leukaemia incidence which suggests a correlation of the incidence of acute lymphoblastic leukaemia in children and areas of England with high levels of radon in the environment.[1] Again, the Director Dr Cartwright stressed in his evidence the inadequacies of his data which did not warrant any conclusions of a direct causal association. However, if these studies are confirmed, then radon may be more hazardous than the NRPB currently assumes; Dr Henshaw estimates that as many as 4,500 deaths could be caused by exposure to radon.[2]

Surveys

110. Initially, the NRPB carried out surveys of radon levels for Government to establish the scale and geographical distribution of the radon problem.[3] Having estimated that there are 100,000 houses above the action level, the NRPB is now locating these. On behalf of the DOE, the NRPB provides a free radon measurement service on demand for householders in affected areas.[4] Detectors are sent to householders who request them through the post and the results are processed and given to the householder by the NRPB.[5] About 9,000 on-demand surveys have been carried out and 2,000 houses in total have been located (from both the national surveys and the on-demand surveys). Radon levels in a house vary markedly during the 24-hour day and from season to season depending on how the house is used, heated and ventilated.[6] Concentrations must be measured over several months and averaged out to produce an accurate reading.

111. The NRPB estimates that in order to find the affected houses it will have to survey 400,000 homes in total.[7] The NRPB accepted that at present it was making slow progress in identifying houses but would like to see a target of identifying the bulk of houses above the action level by the year 2000.[8] This, NRPB officials told us, was in line with targets in other countries. At the moment only 1 per cent of the houses are being identified per annum whereas the NRPB would like to see this stepped up to 10 per cent. However, NRPB officials told us that they did not have the resources to cope with the necessary increase in work, nor did they feel that this was an appropriate role for NRPB.[9]

112. The DOE told us that they did not have any timescale for identifying affected dwellings since the onus was on individual householders to contact the DOE or the NRPB.[10] We questioned DOE officials in May 1990 on the limited number of leaflets distributed on radon compared with the large number of houses requiring surveys.[11] In March 1991 Mr Tony Baldry, Parliamentary Under Secretary of State, announced a new radon information campaign to encourage householders to have radon surveys.[12] **We consider that the rate of progress in identifying homes affected by radon prior to this campaign was much too slow. We recommend that the Government commit itself to ensuring the identification of the majority of homes above the radon Action Level by the year 2000.**

113. We received a considerable amount of evidence complaining that radon surveys were currently inadequate. The Soil Survey said that because little or no contextual information about the soil type is being collected the information collected from surveys will be of little value.[13] Somerset County Council told us that experts had been surprised to find that between 1 and 2 per cent of houses in Somerset are above the Action Level and stressed the need for finding ways of predicting where high radon levels might occur in order to target surveys more effectively.[14] The IEHO called on the Government to expand radon surveys to all parts of the United Kingdom and not just the affected areas highlighted by the NRPB.[15]

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[1] Appendix 22.
[2] Q 762.
[3] Wrixon, A.D. *et al*, 1988, *Natural radiation exposure in United Kingdom dwellings*, NRPB-R190, HMSO.
[4] Q 129.
[5] Q 155.
[6] Evidence p 41.
[7] Q 153.
[8] QQ 143, 144.
[9] Q 151.
[10] Q 47.
[11] Q 27.
[12] DOE *News Release* 11 March 1991. See also *Official Report*, 4 June 1991, cols *164–5*.
[13] Appendix 12.
[14] Appendix 18.
[15] Evidence p 245.

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RADON

99. Radon is a radioactive gas formed in the earth from the decay of uranium. According to the NRPB, there are small quantities of uranium in all earth and masonry materials, so radon is continuously created under buildings and within buildings.[1] The concentration of radon in homes in the United Kingdom is on average 20 becquerels per cubic metre of air (20 Bq m^{-3}).[2] However, in certain parts of the country a large number of houses have very high concentrations of radon. The highest level found in Britain is over 8,000 Bq m^{-3}.[3]

100. The National Radiological Protection Board, which has the statutory responsibility of advising Government on the protection of the community from radiation hazards, formally advised in January 1987 that radon concentrations in homes should be limited.[4] This advice was based on evidence of an association between incidence of lung cancer and exposure to radon observed in health studies on miners, including tin and uranium miners. The NRPB calculates that of the 40,000 annual deaths in this country from lung cancer, 2,000–2,500 may be due to exposure to radon.[5] Measures aimed at reducing exposure to radon have commenced. This is to be voluntary in existing homes and an advisory Action Level of 200 Bq m^{-3} has been set by Government for householders. For new homes, in certain parts of the country, the Building Regulations require that builders achieve as low radon concentrations as reasonably practicable.[6] There is compulsory restriction of radon levels in all other buildings under health and safety legislation; exposure to radon in places of work is restricted by the Ionising Radiation Regulations 1985.[7]

101. The NRPB carried out a national survey of radon concentrations in homes in the mid 1980s. They found that the greatest number of houses above the Action Level of radon occurred in Cornwall and Devon. A large part of these counties has been defined as an "affected area" where special action is to be taken to identify and remedy homes with high concentrations of radon.[8] Somerset, Northamptonshire and Derbyshire also have many houses above the action level but are less affected than the South-West. The NRPB is currently investigating whether other "affected areas" need to be defined.[9] In all, the NRPB estimates that 100,000 homes in Britain as "a crude estimate" may be above the Action Level and 10,000 places of work may be subject to the Ionising Radiation Regulations; most of these are located in the South-West but there are also appreciable numbers elsewhere (see Figure 3).[10]

102. Taking action to reduce radon levels is still relatively new and according to the NRPB, the impact of the schemes currently in effect has been rather restricted.[11] We had considerable evidence from local authorities and other bodies concerned about the current knowledge about the problem and the means of resolving it. The subject is extremely complex and there are significant gaps in knowledge of the effect of radon and how its ingress into buildings can be prevented.

The impact of radon

103. The extent and the nature of the health effects of radon gas are the subject of some controversy. There are two major issues. Firstly, some scientists have questioned whether radon does cause lung cancer on the scale suggested by the NRPB.[12] Secondly, some very recent research has suggested that there may be an association between exposure to radon and a number of other cancers, previously unsuspected of being linked with radon.[13]

104. The reason for doubting the link between domestic exposure to radon and lung cancer is that NRPB calculations of risk have all been extrapolated from data on miners. No British epidemiological studies of exposure to actual doses of radon in the home have yet been

[1] Evidence p 40.
[2] A becquerel is a measure of radioactivity.
[3] Q 140.
[4] Evidence p 40, p41.
[5] Evidence p 2, p 41.
[6] Evidence p 41.
[7] S.I. 1985 No 1333.
[8] Q 145.
[9] Q 148.
[10] Evidence p 42. Q 231.
[11] Evidence p 43.
[12] Evidence p 154.
[13] Evidence p 155 and Appendix 22.

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119. While we agree with current strategies for homeowners, we do not think that the position for tenants is acceptable. It seems to us that it must be the landlords' responsibility to ensure that the accommodation provided is safe and it is for the Government to encourage landlords to fulfil these responsibilities and require public authorities to set the example. The present radon programme seems to have ignored the needs of tenants. **We recommend that the Government advise local authorities and other landlords of their responsibilities in radon-affected areas and prepare to allocate and where necessary increase the Housing Investment Programme funds to meet the additional needs of surveys and radon-proofing.**

Remedial action and financial assistance

120. When high levels of radon are found, it is the responsibility of householders to take remedial action. DOE officials told us that grants were available but we were unable to find any proof that any grants had been given under the scheme. Carrick District council told us that they had not awarded any.[1] This was partly because the council had decided to give no discretionary grants, partly because the full cost of these would fall on the Council and they had other claims on expenditure, and partly because the restrictions on giving grants for radon-proofing were so great that very few people would qualify.[2] The DOE told us that Carrick were in error in their understanding of the grant scheme and that local authorities receive a 75 per cent Exchequer contribution towards all their expenditure on grants.[3] The IEHO called for the extension of the mandatory house renovation grant to include all dwellings with radon levels above the action level.[4] The DOE suggested that this was inappropriate because it would not have the flexibility of a discretionary system where resources can be targeted on those areas where problems are most extreme. **We consider that, in common with other health risks, funds should be made available to those who cannot afford to pay for remedial action. The current system does not appear to be working satisfactorily. We recommend that the DOE review the take-up of grants for radon-proofing. Should the situation not improve we recommend that the DOE develop a mandatory system of grant for radon-proofing, targeted at Affected Areas.**

121. We were also unable to discover much evidence of householders actually taking action. The NRPB told us that they do not follow up to see if radon-proofing is carried out but that from the information which they had it would seem that not many householders did take action.[5] The IEHO confirmed this impression.[6] One of the problems is the absence of any detailed authoritative guidance on effective radon-proofing. BRE told us that following the advice in the Householders Guide would not necessarily lead to a reduction in radon levels.[7] In these circumstances, it is hardly surprising that householders are reluctant to spend £500–£5,000 on radon-proofing measures.[8] In 1988, the DOE stated that a more detailed Builder's Guide to Radon was being prepared. The DOE told us that this had been delayed because very few households were prepared to become involved in the study which was to provide the detailed information for the guide.[9] We do not think this is at all satisfactory. **When NRPB is successfully surveying radon levels in thousands of homes, it is particularly unfortunate that the detailed guidance that is necessary for implementing radon-proofing is still not available. We recommend that the production of advice on radon-proofing be greatly accelerated.**

122. We were concerned that the current lack of information could lead to a situation in which "cowboy" builders might flourish. Carrick District Council told us that there were already many cowboy firms preying on people.[10] Government advice on radon-proofing at present directs householders to trade federations in the building industry rather than specialists.[11] We discussed this at some length with Mr Trippier.[12] We consider that in the present situation householders

[1] Q 679.
[2] Q 680.
[3] Appendix 31.
[4] Evidence p 245.
[5] Q 176.
[6] Q 1021.
[7] Q 921.
[8] Q 1022.
[9] Appendix 31.
[10] Q 670.
[11] Q 1072.
[12] QQ 1064–1076.

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94. The Health Education Authority, ASH and other groups consider that legislation is needed to protect non-smokers from environmental tobacco smoke in public places and workplaces.[1] The Department of Health concludes that

> "Because exposure is so widespread and because of the considerable number of adverse effects which are probable, in addition to the clear risk of lung cancer, ETS should be seen as the most important of current indoor air pollution problems".[2]

95. As with many environmental issues involving specific chemicals, there is conflicting scientific evidence about impacts. We think that the nuisance and irritation which tobacco smoke causes is an equally important part of the argument, which has perhaps been somewhat overshadowed by the controversy over the evidence on health impacts. Mr Appleby, a consultant with Building Health Consultants told us that in his experience environmental tobacco smoke is the most common source of olfactory discomfort in buildings and for this reason, rather than any relating to health effects, he normally recommends a no-smoking policy, with the provision of separately ventilated lounges for smokers.[3]

96. Irritation to eyes, nose and throat in a smoky room and the lingering smell of tobacco smoke undoubtedly cause annoyance to many people. According to national opinion polls, the overwhelming majority of both smokers and non-smokers think that smoke-free accommodation is both necessary and desirable in most public places.[4] In addition, special groups in the population have particular problems with tobacco smoke. The National Asthma Campaign told us that exposure to tobacco smoke is a problem for asthmatics, many of whom have to restrict their social lives because of irritation and discomfort when exposed to the smoke of others.[5] A recent survey of 50,000 asthmatics carried out for the National Asthma Campaign revealed that for 79 per cent of asthmatics, smoky atmospheres are an important trigger of symptoms.[6] A further factor which must be taken into account is the cost of the additional cleaning and ventilation required when smoking is allowed.[7] Against this must be weighed the rights of the 30 per cent of the population who are smokers.[8]

97. We heard that a number of countries, including the United States of America, Canada, Ireland, Belgium, Germany and the Netherlands have enacted legislation to segregate smokers and non-smokers in public places and at work.[9] BAT scientists told us that such bans have been successful in stopping smoking[10] but do not enable people to breathe clean air, since

> "All buildings have chemicals in them ... I cannot believe that it is logical to ban ETS and not to worry about the other sources of those chemicals."[11]

98. In our view, public expectations about an acceptable internal environment have changed: people now want a much better quality internal environment. Being free from unwanted exposure to other people's smoke is a part of this. Elsewhere in this Report, we have made a large number of recommendations aimed at improving the quality of the internal environment which cover both improved ventilation and reducing the emission of pollutants. We consider that this twin approach is no less important in dealing with the impact of tobacco smoke. We believe that the Government should make greater efforts to ensure that people are not involuntarily exposed to tobacco smoke and that the need to protect children in particular is given more attention. **We therefore recommend that the Government highlight the risks to children in its health education. Since environmental tobacco smoke cannot be dealt with separately from other pollutants in terms of health, good ventilation is paramount in minimising its effects. We therefore recommend that the HSE be given the necessary powers to promote this aim effectively. The Government should then accelerate the promised guidance on segregation of smokers and non-smokers and the rights of people to smoke-free air in work places and public places. This should be integrated with other guidance which is given under health and safety at work legislation and building regulations.**

[1] Appendix 6, Appendix 8, Evidence p 183.
[2] Appendix 27.
[3] Evidence p 125.
[4] Appendix 6, Evidence p 183.
[5] Appendix 8.
[6] *ibid.*
[7] Evidence p 181, p 182.
[8] Q 872.
[9] Appendix 6.
[10] Q 878.
[11] Q 876.

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Source: https://www.industrydocuments.ucsf.edu/docs/rqhl0000

Resources must be targeted at this problem in the most efficacious way. **We recommend that the fitness standard be amended to include the requirement for adequate thermal insulation in relation to heating and ventilation systems.**

134. BRE research has shown that the majority of problems with damp occur in the public and private rented sector.[1] Although local authorities have a duty to take action on damp private sector housing under the Local Government and Housing Act 1989 (which is implemented by environmental health officers), there is no duty for environmental health officers in relation to public sector housing. Indeed, not only do local authority environmental health officers lack duties towards council tenants, the courts have decided that they *cannot* take action against a local authority.[2] We are extremely concerned at a situation in which tenants of private sector property have the full services of local authority environmental health departments in ensuring their homes are brought up to acceptable standards, yet this is denied to public sector tenants.

135. When we explored the matter with the Minister, he pointed out that local authorities do have a statutory duty to maintain the fitness standards of their own housing stock and local authority tenants in damp housing have been successful in taking their local authority landlords to court.[3] Mr Trippier questioned the feasibility of local authority environmental health officers prosecuting their own employers.[4] We disagree. It seems to us to be quite unacceptable that public sector tenants should be denied the protection and assistance available to private sector tenants. The current situation is reminiscent of the gamekeeper/poacher syndrome which in the past we have strongly criticised in other areas of environment regulation.[5] In areas such as water pollution and waste disposal, the Government has taken legal steps to meet these criticisms and we feel similar action is required here. Just as Crown immunity has been removed from many aspects of central government activity which are now for the first time subject to control, so we consider local government should be subject to regulation to protect the public. **We recommend that legislation should be introduced to place Chief Environmental Health Officers under a duty to take action on damp and unfit public sector housing, but of course we accept this will have resource implications.**

TOXIC SUBSTANCES

136. We heard evidence that increasingly emissions, from furnishings and building products are making a large contribution to the pollution load in the internal environment. Again, we seem to know very little about emission rates, their longevity in the atmosphere and their effects on occupants. The concern until now has been in relation to acute, short term exposure. New legislation will to some extent address this issue, in implementing the Construction Products Directive and the COSHH Regulations. We have already made a recommendation in this regard for the building regulations.[6] However these will probably only address part of the problem. **We consider that many people and designers would prefer to use products which have low chemical emission properties and do not contribute to indoor pollution and that labelling is the starting point. It is our intention to look in detail at the whole question of environmental labelling. Meanwhile, we recommend that emission characteristics and indoor pollution be included, where relevant, among the criteria against which applications for the award of an eco-label are to be judged.**

CONCLUSION

137. The Government has, quite rightly, set stringent standards for the improvement of outdoor air quality. Engineers have shown that they can design into buildings all the necessary characteristics to meet those standards. However, the indoor environment has suffered from the neglect of Government, architects, developers and others who have all shown that they have the ability to act to good effect. Two things have been lacking: the will to take action; and the framework through which to act.

138. We have been conscious in this inquiry, and not for the first time, that we have been able to shed light on some of the more forgotten corners of government responsibility. We believe that the Government would acknowledge this. Having done that, we would expect Ministers to act.

[1] Q 936.
[2] QQ 1012, 1014.
[3] Q 1095.
[4] *ibid.*
[5] HC (1986–87) 183; HC (1988–89) 22.
[6] Paragraph 77.

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Confidentiality

114. The results of a NRPB survey are confidential to the householder. For example, high levels of radon were found in Street, in Mendip District: the Council told us that the fact that test results are confidential has caused considerable public anxiety and recommended a much more direct approach from NRPB in those areas which surveys have shown to be most at risk, while still retaining householder confidentiality.[1] We consider it unsatisfactory that NRPB may know that high levels of radon occur in a house yet be under no obligation to warn the local community and neighbours of the potential risk to their health. NRPB told us that they do get requests for surveys from neighbours of high radon properties.[2] However we feel that this is insufficient. **We recommend that the Government act to ensure that where high risk homes are discovered other householders in the vicinity, likely to have equally high levels of radon, are approached and offered free surveys.** We consider that this could easily be done without breaching the confidentiality of the original householder.

115. Because of the confidentiality of radon test results, there appears to be nothing to prevent a householder selling a house with high radon levels without notifying the incoming purchaser.[3] Miss Frances of Carrick District Council told us that in New Jersey the production of a satisfactory certificate of "radon safeness" is compulsory at the time of a house sale.[4] We consider that in the interests of encouraging more attention to mitigating exposure to radon, solicitors ought to be encouraged to ask about radon levels in acting for purchasers. The NRPB told us that there has been no specific information or teaching provided on radon for solicitors and other professionals, in contrast to other issues, and that this was worth attention.[5] **We recommend that the DOE seek to ensure that solicitors and other professionals are provided with the opportunity for education on the existence of radon and means to deal with it through seminars or some other means and draw the attention of professional bodies such as the Law Society and the RICS to this problem so that they might advise their members of the responsibilities they may have to client purchasers to ascertain the risk of radon in houses being purchased in certain parts of the country.**

Local authorities and radon

116. The IEHO complained that insufficient use was being made of the local knowledge of local authorities in current attempts to tackle the radon problem. The NRPB only provides data from radon surveys to local authorities collated on a postcode basis and this was not always very helpful, nor does it seek to work in partnership with local authorities.[6] The IEHO is of the view that local authorities should have a much greater role in radon protection. In particular, they consider that local environmental health officers should initiate and run campaigns aimed at raising awareness of the radon issues and promoting remedial works, in collaboration with NRPB.[7]

117. We asked environmental health officers from Carrick District Council about radon in council houses. Mr Mellor, the Chief Environmental Health Officer, told us that Carrick had not taken any action on its own housing. He said

> "The Council has not really been able to formulate a policy with regard to the houses it owns because ... what happens when the test has been undertaken and it is positive ... It could lead the Council into quite high levels of expenditure ... I believe the Council are, not unreasonably, taking a 'wait and see' attitude towards it."[8]

118. We found this omission on the part of local authorities to be quite shocking. The IEHO confirmed to us that they knew of no local authority in either Cornwall or Devon which had carried out a full survey of their own housing either because of the costs or for fear of blight.[9] Some other authorities have apparently carried out surveys but the practice, again according to the IEHO, "is not widespread".[10] Mr Trippier in evidence to us said that, while local authorities were free to conduct surveys on their own stock, the Department was anxious to encourage individual surveys both for homeowners and tenants.[11]

[1] Appendix 17.
[2] Q 210.
[3] QQ 217, 218.
[4] Evidence p 142.
[5] QQ 227, 228.
[6] Evidence p 245.
[7] Evidence p 246.
[8] Q 641.
[9] Q 1008.
[10] Q 1007.
[11] Q 1057.

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